

REMARKS/ARGUMENTS

In the Final Office Action of July 6, 2005, Claims 1-2, 4-7, 9-34, 36-39, 41-54, 56-64, 66-80 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,571,220 B1 ("Ogino et al."); and Claims 8, 35, 40 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino et al.. in view of NPL to Stallings ("Stallings").

1. Rejection of Claims 1-3, 4-7, 9-34, 36-39, 41-54, 56-64, 66-80 under 35 U.S.C. 102(e).

Claim 1 recites a system for providing protected copying of material, comprising a "preprocessing unit" and a "recording unit".

The preprocessing unit is recited as having an output and being capable of providing copy-once functionality on a material before providing the material on its output. Copy-once functionality is further recited as including the following elements:

1. searching for a copy-once indication and a copy-no-more indication in said material,
2. not providing said material on said preprocessing unit output if said copy-no-more indication is found, and
3. remarking said material with said copy-no-more indication before providing said material on said preprocessing unit output if said copy-once indication is found and said copy-no-more indication is not found.

In rejecting Claim 1, paragraph 11 of the Final Office Action asserts that each of the following sections of Ogino et al. discloses the "preprocessing unit" of Claim 1:

1. Col. 10, lines 1-6,

2. Col. 5, lines 39-47, and
3. FIG. 14 item S305.

Applicants respectfully submit, however, that none of these sections supports the assertion.

First of all, each of the cited sections refers to a different apparatus in Ogino et al., none of which completely teaches the preprocessing unit and its interaction with the recording unit as claimed in Claim 1. In particular, Col. 10, lines 1-6 describes action taken by a Set Top Box shown in FIG. 2 (see, Col. 7, line 23 to Col. 10, line 6); Col. 5, lines 39-47 describe operation of a Compliant Recording Apparatus (see, Col. 5, line 43) such as shown in FIG. 6 (see, Col. 10, line 7 to Col. 12, line 37); and FIG. 14 item S305 describe action taken by a Compliant Reproducing Apparatus (see, Col. 12, line 38 to Col. 17, line 17) such as shown in FIG. 10. The relationship and interoperation of these three different apparatuses can be seen, for example, in FIG. 21, wherein the Set Top Box is abbreviated as “STB”.

Although the Set Top Box may perform the task of “searching for a copy-once indication and a copy-no-more indication in said material”, it does not perform the task of “remarking said material with said copy-no-more indication before providing said material on said preprocessing unit output if said copy-once indication is found and said copy-no-more indication is not found.”

An inspection of the block diagram of the Set Top Box in FIG. 2 and a reading of its description clearly show that there is no watermark (WM) rewriting or adder unit in the Set Top Box.

Although FIG. 3 describes the superimposition of the code string PNa on a broadcast signal, this superimposition has already been performed prior to the Set Top Box receiving the signal. See, Col. 7, lines 1-16. The Set Top Box does not place this code string on the broadcast signal.

Accordingly, the Set Top Box does not teach the “preprocessing unit” of Claim 1.

Likewise, the Compliant Reproducing Apparatus as shown in FIG. 10 also does not perform the task of “remarking said material with said copy-no-more indication before providing said material on said preprocessing unit output if said copy-once indication is found and said copy-no-more indication is not found.” In particular, the WM adder 109 of the Compliant Reproducing Apparatus of FIG. 10 only generates a “Never Copy” indication. See, Col. 13, lines 35-65.

Accordingly, the Compliant Reproducing Apparatus does not teach the “preprocessing unit” of Claim 1.

Although the Compliant Recording Apparatus as shown in FIG. 6 may perform the task of “remarking said material with said copy-no-more indication before providing said material on said preprocessing unit output if said copy-once indication is found and said copy-no-more indication is not found,” it does not provide the material on its output to a recording unit coupled to it “through a secure channel” so that the recording unit may copy the material, as claimed in amended Claim 1. The only shown output of the Compliant Recording Apparatus 200 is a RAM disc 40.

Paragraph 11 of the Final Office Action further asserts that Col. 6, lines 39-51 of Ogino et al. discloses the recording unit of Claim 1. The cited section, however, describes operation of the Compliant Reproducing Apparatus as shown in FIG. 10, which is shown to only receive a disc 41 as its input.

The Compliant Reproducing Apparatus is not shown to receive material to be copied from the Compliant Recording Apparatus over a secure channel in any figure of Ogino et al. However, the figures do show the Compliant Reproducing Apparatus providing material to be copied to the Compliant Recording Apparatus over a secure channel.

Thus, in rejecting Claim 1, the Final Office Action takes the position of reversing the flow of material to be copied in Ogino et al. so that it passes from the Compliant Recording Apparatus (which is asserted as being the preprocessing unit of Claim 1) to the Compliant Reproducing Apparatus (which is asserted as being the recording unit of Claim 1). Clearly, this is not the direction that material flows according to Ogino et al. See, for example, FIG. 1, where material passes from the Compliant Reproducing Apparatus 100 to the Compliant Recording Apparatus 200. Also, see, for example, FIG. 16, where material passes from the Compliant Reproducing Apparatus 100 to the Compliant Recording Apparatus 400.

If, however, the output of the preprocessing unit can be construed so as to mean the RAM disc 42, then an argument might be made that the material passes in the form of the RAM disc 42 from the Compliant Recording Apparatus 400 to the Compliant Reproducing Apparatus 100 as shown in FIG. 16. To eliminate such an argument, however, Claim 1 has been amended so that it is clear that the "recording unit is coupled through a secure channel to said preprocessing unit output". Thus, even this argument fails in light of the amendment to Claim 1.

As explained in applicants' previous communication, functionally, the Compliant Recording Apparatuses 200 and 400 of Ogino et al. are analogous to applicants' recording unit of Claim 1 since they perform the actual recording or copying of the material. See, e.g., 211 of FIG. 6 as described in Col. 10, lines 56-60 and S107 of FIG. 9 as described in Col. 11, line 62 to Col. 12,

line 37 for the Compliant Recording Apparatus 200. Also, see, e.g., 211 of FIG. 17 and S407 of FIG. 19 as described in Col. 18, line 65 to Col. 19, line 7 for the Compliant Recording Apparatus 400.

Likewise, the Set Top Box 1 and Compliant Reproducing Apparatus 100 of Ogina et al. are analogous to applicants' preprocessing unit of Claim 1 since they check copy control information in watermarks in the material and only allow sending of the material to the Compliant Recording Apparatus 200 or 400 if the watermarks do not indicate that the material is never to be copied (i.e., "Never Copy") or that no more copies are to be paid (i.e., "No More Copy"). See, e.g., FIG. 2 as described in Col. 10, lines 1-6 for the Set Top Box 1, and FIG. 10 as described in Col. 13, lines 11-34 for the Compliant Reproducing Apparatus 100.

As is evident from inspection of FIG. 2, the Set Top Box 1, however, does not include a component for "marking said material with said copy-no-more indication before providing said material on said preprocessing unit output if said copy-once indication is found and said copy-no-more indication is not found" as claimed in Claim 1. Therefore, the Set Top Box 1 cannot anticipate the preprocessing unit of Claim 1.

Although the Compliant Reproducing Apparatus 100 of FIG. 10 does include a WM adder 109, it does not add a copy-no-more indication (i.e., "No More Copy" by the notation used in Ogina et al.). Instead, it adds the electronic watermark information representing the "Never Copy". See, Col. 13, lines 35-44. Therefore, the Compliant Reproducing Apparatus 100 also cannot anticipate the preprocessing unit of Claim 1.

It is further to be noted that the first embodiment of the Compliant Recording Apparatus 200 as shown in FIG. 2 includes a WM rewriting unit 207 that superimposes the electronic watermark information WM that represents “No More Copy”, see, Col. 12, lines 19-21, which is contrary to the recording unit as claimed in Claim 1, which specifically states that its recording unit is “lacking capability to remark said material with a copy-no-more indication”. As noted in the specification, a key feature of applicants’ system is that it does not include a secondary detector or a remarker in the recording unit and in particular, that its copy-once functionality is performed outside of the recording unit so as to reduce the cost of the recording unit, see, page 8, lines 17-25 of the specification. Therefore, the Compliant Recording Apparatus 200 cannot anticipate the recording unit of Claim 1.

Claim 1 is therefore believed to be patentable under 35 U.S.C. 102(e) over Ogino et al. for the foregoing reasons.

Claims 2, 4-7 and 9-21 are also believed to be patentable under 35 U.S.C. 102(e) over Ogino et al., since they depend from Claim 1, and as such, are believed to be patentable for at least the same reasons as stated in reference to Claim 1.

Further, Claim 10 recites a recording unit that is “capable of communicating information of finding said copy-once indication back to said preprocessing unit if a secure channel is established between said recording unit and said preprocessing unit”, and such capability of communication, or the desirability of such, from the recording unit back to the preprocessing unit is neither taught nor suggested in Ogino et al.

Also, with respect to Claims 15, 16, 17 and 19, the terms “expansion board”, “video capture board”, “network board”, and “network appliance” are not found in Ogina et al., and the references cited in the Office Action with respect to these claims fail to teach or suggest such items. Also, since the Final Office Action takes the position that the “preprocessing unit” of Claim 1 is taught by the Compliant Recording Apparatus of Ogino et al., it is not even suggestible that such an apparatus, which generates a RAM disc as its output, may be implemented in an expansion board on a personal computer since an optical disc drive is needed to perform that function.

Claim 22 recites a method implemented in a recording unit including the function “if said copy-once indication is detected, then transmitting information of said detection of said copy-once indication back to a sender of said material provided a secure channel is established with said sender, otherwise not allowing copying of said material,” and such transmission back to a sender of the material is neither taught nor suggested in Ogina et al.

Although the Office Action asserts that this function is disclosed in Col. 12, lines 19-29 of Ogina et al., a careful reading of that paragraph fails to teach or suggest the function. In particular, the cited paragraph describes step S105 of FIG. 9 in which the CGMS rewriting unit 206 and the WM rewriting unit 207 of the compliant recording apparatus 200 respectively rewrite the CGMS information from (10) to (11) and the electronic watermark information WM to “No More Copy”. There is no discussion in Ogina et al. of transmitting a copy-once (i.e., “One Copy”) indication back to the sender of the material as claimed in Claim 22.

Also, Claim 22 is directed to a method implemented in a recording unit. In rejecting this claim, the Final Office Action relies on activities performed by the Compliant Reproducing Apparatus

100 as teaching certain tasks of the method (i.e., reliance on Col. 6, lines 8-15 and Col. 6, lines 45-51) and activities performed by the Compliant Recording Apparatus 200 as teaching certain other tasks of the method (i.e., reliance on Col. 12, lines 11-18 and Col. 12, lines 19-29). In order to properly teach the method, all tasks must be implemented in the same apparatus.

Further, there is no suggestion or motivation in Ogino et al. to modify one or the other of these two apparatuses so that all tasks recited in Claim 22 may be performed by that one apparatus.

Without such teaching or suggestion, the rejection of Claim 22 is believed to be improper.

Accordingly, Claim 22 is believed to be patentable under 35 U.S.C. 102(e) over Ogino et al. for the foregoing reasons.

Claims 23-34, 36-39 and 41 are also believed to patentable under 35 U.S.C. 102(e) over Ogino et al., since they depend from Claim 22, and as such, are believed to be patentable for at least the same reasons as stated in reference to Claim 22, as well as any applicable reasons stated in reference to Claims 10, 15, 16, 17 and 19.

Claim 42 recites a recording unit including compliance logic configured such that “if either said copy-never or said copy-once indication is detected, then providing information of such detection back to a sender of said material,” and such a recording unit is neither taught nor suggested by Ogino et al. for at least the reasons stated in reference to Claims 10 and 22 above.

Further, paragraph 40 of the Final Office Action fails to even recite this limitation, let alone identify where it is disclosed in Ogino et al., in rejecting Claim 42.

Accordingly, Claim 42 is believed to be patentable under 35 U.S.C. 102(e) over Ogino et al. for the foregoing reasons.

Claims 43-54 and 56-63 are also believed to be patentable under 35 U.S.C. 102(e) over Ogino et al., since they depend from Claim 42, and as such, are believed to be patentable for at least the same reasons as stated in reference to Claim 42, as well as any applicable reasons stated in reference to Claims 10, 15, 16, 17 and 19.

In Claim 64, the recording unit of the claimed system includes compliance logic configured such that “if said copy-once indication is detected, then establishing a secure channel with said preprocessing unit and passing information of said detection of said copy-once indication back to said preprocessing unit over said secure channel”, and Ogino et al. fails to teach or suggest such compliance logic (passing information back to the preprocessing unit from the recording unit) for at least the reasons stated in reference to Claim 10, 22 and 42.

In rejecting Claim 64, paragraph 54 of the Final Office Action identifies the Compliant Recording Apparatus as performing the functions of the “preprocessing unit” of Claim 64 (see, reliance on Col. 11, line 65 to Col. 12, line 10, which describe operation of the Compliant Recording Apparatus), and the Compliant Reproducing Apparatus as performing the functions of the “recording unit” of Claim 64 (see, reliance on Col. 12, 42-48 describing operation of the Compliant Reproducing Apparatus).

As explained in reference to Claim 1, however, material to be recorded is not passed in Ogino et al. from the Compliant Recording Apparatus to the Compliant Reproducing Apparatus over a

secure channel. Instead, it passes in the other direction, from the Compliant Reproducing Apparatus to the Compliant Recording Apparatus over a secure channel (see, FIG. 1 and FIG. 16). So the element of a secure channel is also neither taught nor suggested in this case if the preprocessing unit is considered to be the Compliant Recording Apparatus and the recording unit is considered to be the Compliant Reproducing Apparatus.

Accordingly, Claim 64 is believed to be patentable under 35 U.S.C. 102(e) over Ogino et al. for the foregoing reasons.

Claims 66-80 are also believed to be patentable under 35 U.S.C. 102(e) over Ogino et al., since they depend from Claim 64, and as such, are believed to be patentable for at least the same reasons as stated in reference to Claim 64, as well as any applicable reasons stated in reference to Claims 10, 15, 16, 17 and 19.

3. Rejection of Claims 8, 35, 40 and 55 under 35 U.S.C. 103(a).

If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed.Cir. 1988).

Claim 8 is believed to be patentable under 35 U.S.C. 103(a) over Ogino et al. in view of Stallings since it depends from Claim 1, and as such is believed to be patentable for at least the same reasons as stated in reference to Claim 1, since Stallings also fails to teach or suggest the elements of that claim which are neither taught nor suggested by Ogino et al.

Claims 35 and 40 are believed to be patentable under 35 U.S.C. 103(a) over Ogino et al. in view of Stallings since they depend from Claim 22, and as such are believed to be patentable for at least the same reasons as stated in reference to Claim 22, since Stallings also fails to teach or suggest the elements of that claim which are neither taught nor suggested by Ogino et al.

Claim 55 is believed to be patentable under 35 U.S.C. 103(a) over Ogino et al. in view of Stallings since it depends from Claim 42, and as such is believed to be patentable for at least the same reasons as stated in reference to Claim 42, since Stallings also fails to teach or suggest the elements of that claim which are neither taught nor suggested by Ogino et al.

Conclusion

Claims 1, 2, 4-64, and 66-80 are pending in the application. Reconsideration of the rejected pending claims is respectfully requested for the reasons herein stated, and an early notice of their allowance earnestly solicited. If it would expedite the prosecution of this application, the Examiner is encouraged to contact the undersigned attorney at any time to further discuss or clarify any arguments made by applicants in this communication.

Respectfully submitted,
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Dated: 10/6/05, 2005

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